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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,659	03/15/2002	Jeffrey A. Tilton	25102A	2971
22889	7590	05/18/2006		
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			EXAMINER BOYD, JENNIFER A	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/099,659

Applicant(s)

TILTON, JEFFREY A.

Examiner

Jennifer A. Boyd

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-7 and 9-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-7,9-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Applicant's Amendments and Accompanying Remarks, filed February 28, 2006, have been entered and have been carefully considered. Claims 1, 15, 18, 20 and 27 are amended and claims 1, 5 – 7 and 9 – 28 are pending. The present invention as currently is unpatentable for reasons herein below.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 5 – 7 and 9 – 28 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Goettmann (US 5,851,355). The details of the rejection can be found in the Office Action dated November 28, 2005. The rejection is maintained.

The Applicant has made amendments to correct minor informalities and does not affect the scope of the previously applied rejection.

Response to Arguments

4. Applicant's arguments filed February 28, 2006 have been fully considered but they are not persuasive.

Applicant argues that Goettmann teaches a web comprising 1 – 10% by weight of the

Art Unit: 1771

second thermoplastic binder material, equated to Applicant's "low melt bicomponent fiber", while Applicant requires 20 – 60% by weight of low melt bicomponent fiber. Although Goettmann teaches outside Applicant's claimed range, Goettmann specifically states that the range and blend of bicomponent fibers may be varied to effect desired physical properties (Goettmann, column 6, lines 35 – 40) as long as the sheet porosity is between 5 – 10 cfm (Goettmann, column 55 – 65). The Examiner has submitted that it would have been obvious to optimize the amount of low melt bicomponent fibers. Absent any unexpected results for Applicant's claimed range, the Examiner submits that it is obvious to optimize the amount of bicomponent fibers to 20 – 60% by weight of the insulating material. The Applicant has not provided any evidence of unexpected results. The Applicant notes that an increase to 2 to 6 times as much bicomponent fibers is not encompassed by Goettmann's statement of varying the range and blend of bicomponent fibers. It should be noted that increasing the percentage of low melt bicomponent fibers would in turn decrease the percentage of other fibers. This does not imply a change in porosity only a change in composition of the web. Additionally, Applicant's arguments do not suffice as evidence.

Applicant argues that Applicant has claimed that the *average* fiber diameter of the low melt bicomponent, high melt bicomponent and staple fibers is between 18 – 22 microns. The Examiner has submitted the calculation of the diameter of the polyester staple fiber for the Applicant to demonstrate how close the polyester staple fiber diameter is to the claimed average fiber diameter but has relied on *In re Boesch* to support the argument that the average fiber diameter can be optimized to 18 – 22 microns. The Examiner has reviewed the submitted product literature for Kuraray EP-101 fibers and N-720H fibers which Applicant indicates that it suggests

Art Unit: 1771

that the diameters of these fibers are substantially less than 17.6 microns. The Examiner has acknowledged that the Applicant is claiming the average fiber diameter and not individual fiber diameters. Based on Goettmann's statement that it is within the scope of the invention to modify various parameters based on desired physical properties (Goettmann, column 6, lines 20 – 45), the Examiner submits that the average fiber diameter is optimizable based on the desired physical properties. If the Applicant submits that the claimed average fiber diameter range has unexpected results, the burden is upon the Applicant to demonstrate that the claimed ranges are not a matter of simple optimization. The Examiner highly suggests to the Applicant to submit a 37 CFR 1.132 Declaration to establish unexpected results. In the Declaration, the Applicant should compare a sufficient number of tests both inside and outside the claimed range to show the criticality of the claimed range. *In re Hill*, 284 F.2d 955, 128 USPQ 197 (CCPA 1960) and must compare the claimed subject matter with the closest prior art to be effective to rebut a prima facie case of obviousness. Alternatively, the Applicant could submit evidence that the substrate of Goettmann cannot have an average fiber diameter of 18 – 22 microns and meet the required porosity of 5 – 10 cfm.

Applicant has requested objective evidence to support that the Kuraray EP-101 fibers and the N-720H fibers are concentric sheath/core CoPET/PET fibers. In US Patent 6,977,111, Example 2 discusses the use of N720 polyester binder fibers having a sheath component of low melting point PET and a core component of PET which are manufactured by Kuraray Co., Ltd. (column 26, lines 1 – 10). According to US Patent 6,977,111, "low melting point PET" is a copolyester (column 10, lines 20 – 30). Therefore, Kuraray N720 fibers are concentric sheath/core CoPET/PET fibers. According to US Patent 5,851,355 (the applied reference), EP-

Art Unit: 1771

101 fibers by Kuraray have a co-polyester sheath and a polyester core (column 6, lines 1 – 20). According to US Patent 6,977,111, Examples 9 and 10 discuss the use of non-stretched Kuraray EP-101 fibers (columns 31 and 32). According to Table 2 in US Patent 6,977,111, the non-stretched EP-101 fibers are PET. The Examiner submits that EP-101 fibers are concentric sheath/core CoPET/PET fibers.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer Boyd
May 10, 2006


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700